
Environment, Safety and Health Plan for Computing Division for FY05

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Summary and Acknowledgements

The Computing Division achieved an outstanding safety record in FY04. This continued into the first quarter of FY05. We are rightfully proud of our attention to safety in the workplace. Each and every member of the division is to be congratulated on playing their part in helping us work safely. Nevertheless there are still areas of concern and issues that are not being addressed promptly.

In order to make a proactive plan for the division to improve awareness, improve everyday procedures, improve training and improve the overall incorporation of safety matters into our daily lives, the Computing Division declared a Stand-Down from normal work on the morning of Monday, January 24, 2005. All members of the Computing Division spent time thinking about safety and how we might, as an organization within our laboratory, improve our safety program.

Special thanks go to Gerry Bellendir, Associate Head for Operations, the Computing Division facility operations team (Jack McNerland, Mark Thomas, Phil Lutz, Keith Coiley) and the Computing Division Senior Safety Officer (SSO) (Amy Pavnica) for their special roles in our division safety program. Also thanks go to Gerry's assistant David Ritchie, who organized the Stand-Down event.

The plans in this document are the result of input received from the entire division in the course of the Stand-Down.

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1 Targeted Areas for Improvement in FY05

1.1 The tracking and follow up of concerns voiced by employees.

We received many comments about issues that had been raised, some many times, where the employee felt there had been no follow up. Many of these issues were about matters that could not be addressed by the Computing Division alone. Many members of the Computing Division have significant concerns about the Laboratory's safety and health, including general issues of housekeeping, road and traffic hazards, snow removal, lighting, etc. Many of these issues have been brought up several times over the years and no satisfactory responses (if any) have been communicated back to people. Some people mentioned concerns where the cost of implementing the remedy proposed by an employee clearly had to be weighed against the actual risk and the responsibility of each person to recognize and deal with hazards. Some concerns that employees felt they had raised were straightforward issues that should have been dealt with by line management in the Computing Division. In all cases it was clear that a better system of acknowledging, tracking, dealing with, and communicating with employees who voice concerns needs to be put into place.

1.2 Communications from lab to division to department head to section and group leader to employee.

We received much feedback that information did not always flow smoothly along the management chain from lab to division to department head to section and group leader to employee. Many people felt they received little or no information about matters that had been raised in the Computing Division Operations Meeting. Some information about incidents at the lab was not being discussed at the Operations Meeting. People wanted to know

more about what had happened at the lab or at other labs and wanted to hear more lessons learned and root cause analyses.

1.3 Training of employees and contractors.

We received requests to provide more and better training in some cases. Possible areas for more or different training, or for ensuring appropriate training, are:

- working in computer rooms
- working away from the lab
- training for contractors
- supervision of contractors
- working alone
- stopping work
- informing the right people about building concerns
- more general awareness training (such as the DuPont training) for a wider group of employees

1.4 Access to information about safety and procedures.

We received some feedback that people did not always know where to go for information about available programs (e.g., safety shoes or glasses, ergonomic chairs, etc.). Also more pointers to information available on other web sites was felt to be needed on Computing Division pages.

2 New Processes for FY05

2.1 Tracking of Concerns

The Computing Division Safety Stand-Down identified the need for the Division to internally report, track, and follow up safety concerns in a more consistent way.

Action:

The Division plans to address this by implementing an electronic work-flow process. This new process will allow the Division's employees and subcontractors to record safety concerns and comments into a database application and track the progress of these concerns. It will allow Division management to provide better feedback upward and downward, and to better communicate progress on safety concerns. Most importantly it will ensure that all safety concerns are appropriately addressed and don't "fall through the cracks".

The work-flow process is expected to leverage existing tools and processes, such as the Computing Division's Help Desk and the Remedy ticket-tracking application, and to integrate with future Division-wide work-flow tools. It is anticipated that the Division's SSO will be the "gatekeeper" for concerns entered into the system and will as appropriate direct concerns either to line or Division management, to ESHTRK, or to a division committee for consideration and transmittal to lab management. We consider that ESHTRK is the lab mechanism for tracking the safety findings that need to be addressed at that level. The Computing Division system will focus on capturing all concerns and opinions, many of which may not be simple safety "findings".

Costs:

Assuming the existing Remedy helpdesk application is used, the effort to implement a new work process will be fairly small (a few FTE weeks). The work process is very similar to ones already in place, e.g. for building management. There will be impact on Help Desk effort if concerns are accepted by walk-in, phone or email. This can be avoided if a web-based form is used to capture the information. There is likely a large impact on the SSO from handling concerns as they arrive, directing them appropriately, replying, tracking status, reporting, etc. and similarly for line management. It is anticipated that this will take many hours each week to deal with the initial concerns (those collected at the Stand-Down). Thereafter it is expected to be on the order of one to two hours per week.

Schedule:

March 1, 2005 – Implement tracking category and workflow in Remedy.

March 15, 2005 – Implement first web page for entry of safety concerns and ideas and reports for viewing the concerns and ideas. All concerns raised at the Safety Stand-Down are to be entered into the tracking system. Employees will be encouraged to use the system for further concerns and to view the progress of their concerns.

April 15, 2005 – Final web page and reports of concerns available. All initial concerns will be entered, responded to, and dispatched appropriately – to ESHTRK or the Division’s Safety Awareness Committee for consideration.

2.2 Safety Information and Issues Communication

The Computing Division Safety Stand-Down heard from many members of the Division about their perceived lack of communications about safety issues, follow up to concerns, and integration of information about safety in general communication mechanisms.

Action:

Within the Computing Division itself we propose to address this by increasing the prominence of "safety" on our Division internal web pages. As examples of improved communication, the following will be considered:

- buttons on the main internal Computing Division web page
- safety logos on several pages
- improved resource page for managers and employees
- direct links to useful ESH web pages such as "tips of the week" at <http://www.fnal.gov/pub/today/safety/index.html>
- our own regular "safety in the Computing Division" web page news item
- communication of “near misses” and their root causes

Linking to a Computing Division safety mission statement on the Computing Division public main page would demonstrate the focus on safety within the Division.

We will also talk to the ES&H section on web pages and reports we would like to ask to be provided for the Division.

Costs:

Additions to the Computing Division web site will be integrated into the current groups who are responsible for the Computing Division web pages. The work will be ~1 FTE week initially and ~8 hours a month as follow up.

Schedule:

March 1, 2005 – First revision of some pages to include additional pointers.

March 15, 2005 – Additional improved web pages and pointers. First version of the Computing Division web page safety news item to be published.

2.3 Computing Division Safety Awareness Committee

Many members of the Computing Division have significant concerns about the laboratory's safety and health, including general issues such as housekeeping, road and traffic hazards, snow removal, and lighting. Many of these issues have been brought up many times over the years and no satisfactory responses (if any) have been communicated to people.

Action:

We propose a Computing Division Safety Awareness Committee composed of representatives from the departments and the Division Office. The purpose of the committee is to solicit, collect, and assess the safety and health concerns of the Computing Division, to discuss those concerns, and to prioritize them based on a method of cost-benefit analysis which the committee will be charged to develop. Items for consideration by this committee are expected to develop out of concerns submitted by employees where the resolution of the concern is not straightforward but where considerable sums of money might need to be spent and where the effect of the proposed remedy for the concern might not be clearly understood.

The committee's recommendations and opinions will be transmitted to the Division Head and the Computing Division SSO, and, in cases where the

matter does not lie solely within the purview of the Computing Division, to the Division's representative to the Laboratory Safety Committee (LSC). We believe that further consideration should follow the channels of the LAM meeting, the LSC, and the Laboratory's management for consideration and action.

Cost:

The cost of this activity could be estimated as follows: 4 members meeting once a month as well as preparing reports, communicating and interfacing to the Division Office personnel and the Laboratory safety groups might come to 6 hours a month for each person, or 24 FTE-hours per month. This would be true only for the initial months with less time required on a continuing basis.

Implementation Schedule:

March 1, 2005 – Definition and charge to committee developed.

March 15, 2005 – Call for membership of the committee. Develop agenda for first meeting. Appoint chair of committee. Solicit input from Division on agenda items to be considered.

March 15-30, 2005 – First committee meeting announced.

April 1, 2005 – First committee meeting.

2.4 Computer Room procedures and training

What we do today:

- Reading and signing the computer room Hazard Analysis is required to work in these rooms (required for entry into LCC & GCC)
 - must be renewed every 2 years
 - signed document submitted to SSO
 - SSO enters course completion into employee's ES&H TRAIN records

- Reading the Computer Room Work Rules & Procedures document is requested (no entry into TRAIN)

Improvements and Actions:

1. Review and update the above documents regularly. Include recommendations and resources about working alone.
2. Make this training information available as a TRAIN online course, similar to GERT
3. Provide formal classroom training for GCC with part of the class in the computer room itself
4. Develop and post emergency signage

Ways need to be found for employees to more actively engage in keeping these documents up to date. This may come about naturally through the proposed concerns tracking system in 2.1 above.

Costs:

Review and update of Hazard Analysis and Computer Room Work Rules and Procedures will take 1 to 3 person days.

Development of a training course online for incorporation in TRAIN will take about 2 person-weeks.

Preparation of formal classroom/computer room training for GCC will take about 4 person-weeks of preparation time.

Total for all improvements above is estimated to be about 7 person-weeks in the first year and about 3 person weeks/year thereafter.

Schedule:

March 15, 2005 – Develop training course for GCC.

April 15, 2005 – Finish review of all existing documents and develop materials for TRAIN course.

June 1, 2005 – Incorporate training materials into TRAIN (depends on ES&H section work also – to be discussed with them).

2.5 Tips for Travelers

Several concerns were raised about the safety of our employees when traveling and when working at other laboratories or observatories. Some serious concerns about safety at CERN were raised, not all of which can be addressed by the Computing Division. Some clarifications of rules when traveling were felt to be needed

Action:

The Computing Division will develop information on tips for travelers and guidelines when working away from the lab. A small group of people who have experience in this area will be asked to develop this information with assistance from the ES&H section.

Cost:

This part of the project is estimated to take about 4 person weeks of effort to develop the first version and about 1 person week of effort per year thereafter to maintain the information as current.

Schedule:

March 15, 2005 – Charge to group developed and membership of group identified.

May 15, 2005 – First draft of information available and posted for comment.

June 15, 2005 – Final tips and guidelines posted.

3 Motivational ideas

In the course of the Safety Stand-Down several interesting ideas for motivating people or for raising awareness were brought forward. We list them below. Other ideas are expected to be submitted as a result of the new elements of the Computing Division safety program listed above in section 2. They will all be considered by the Computing Division Safety Awareness Committee who will make recommendations to the Division Head to do one of the following:

- implement the suggestion
 - pass the suggestion on to the lab safety committee
 - give feedback to the employee and an explanation of why the suggestion is not being implemented at this time (SSO)
1. Special training on how to actually stop unsafe work or suggest to colleagues that their judgement on what is safe is questionable. Training videos (e.g., John Clees series) were suggested as both effective and amusing.
 2. Electrical awareness display.
 3. Special visitors safety awareness program – including information in a visitor's packet.
 4. Safety walkthroughs by various people – not just managers.
 5. Celebration of achievements (other than no injuries) and awards for good suggestions.
 6. Stand-Down or inspection program in computer rooms to catch problems before they happen.
- Publicize near-misses both at Fermilab and elsewhere and their root causes.

Two specific suggestions in the area of communications might more naturally be addressed by ESH or the Laboratory committees:

- a) A specific award for "safety suggestions" that make a significant difference to the safety and environment at the Lab.
- b) Visitor Handouts at the Gate, which might include information such as a map of the site and information about safety and environmental issues.